Leaders' Forum on Sustainable Development

April 4, 2000
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Canada

Preface

The Leaders' Forum on Sustainable Development will provide a venue for senior federal government officials to consult with senior representatives of Canadian society on the Government of Canada's approach to sustainable development and on larger issues surrounding sustainability in Canada.

The driver behind the Forum is the updating of federal government departments' sustainable development strategies. Federal departments and agencies were first required to prepare sustainable development strategies and to table them in Parliament in 1997. As part of the continual process towards sustainability, federal departments and agencies must update their sustainable development strategies every three years. The second generation of sustainable development strategies is currently being developed for tabling in Parliament by the end of 2000.

At the same time, the federal government is moving toward better coordination of sustainable development activities across departments. As a first step, the government is considering opportunities in eight priority areas that could benefit from better interdepartmental coordination including defining goals and objectives, implementation, and reporting on progress.

The purpose of this document is to provide the basis for dialogue with Forum participants. It contains an overview of the broad sustainable development challenges and opportunities facing Canada, followed by presentations of the eight theme areas targeted for coordinated sustainable development planning by the federal government.

The views and suggestions of the participants in the Leaders' Forum are being sought on these eight theme areas, on the broader sustainability challenges facing Canada, and on the federal government's sustainable development strategy process. In particular, consideration could be given to the following questions:

- Are the eight theme areas being proposed for coordinated sustainable development planning the most appropriate?
- Are there additional challenges and opportunities that have not been identified?
- Is the federal government's sustainable development strategy process effective for addressing the sustainable development challenges facing Canada?
- How does your organization see itself working with the federal government towards sustainable development objectives?

The views and feedback received at the Leaders' Forum will provide input into the updating of sustainable development strategies. (Departments and agencies will hold further consultations on their draft strategies with stakeholders during the year.) Feedback obtained via the Leaders' Forum will also assist in shaping efforts aimed at more effective coordination across government portfolios towards sustainability.

TABLE OF CONTENTS

Page

I. Sustainable Development Challenges and Opportunities for Canada 3

II. Coordinated Sustainable Development Planning

1. Sustainable Government Operations - A Strategy for Excellence 11
2. SD Indicators and Reporting/Knowledge and Information
   a) SD Indicators and Reporting 15
   b) Knowledge and Information 19
3. Productivity through Eco-efficiency 23
4. Sustainable Development in the International Context 27
5. Federal Sustainable Development Strategy for the North 33
6. Sustainability at the Community Level: An Integrated Federal Approach to Working with Communities 37
7. Social and Cultural Aspects of Sustainable Development 43
8. Sustainable Development and Healthy Canadians 47
   - Appendix : Health and the Eight Priority Themes 53

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SUSTAINABLE DEVELOPMENT CHALLENGES AND OPPORTUNITIES FOR CANADA

A. WHAT IS SUSTAINABLE DEVELOPMENT?

Sustainable development (SD) is commonly understood to mean development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In *Our Common Future (1987)*, the World Commission on Environment and Development stated that:

> *"Sustainable development is...a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are made consistent with future as well as present needs."*

Current Government of Canada work on sustainable development defines it in terms of integrated decision-making based on three major elements:

- A long-term focus seeking to preserve and enhance economic, social and natural capital in order to improve the quality of people's lives and ensure a continuing legacy for the future;
- A horizontal perspective that fully incorporates social, economic and environmental factors; and
- Recognition of the interdependence between domestic and global activities.

This approach reflects the balance present in cohesive societies that consider the social, environmental and economic implications of their decisions, and that create policy frameworks that unify the goals of government, industry, institutions, communities and individuals. Finding this balance is what will contribute to enhanced quality of life for Canadians now, and in the future.

B. A GENERATION OF PROGRESS

Thinking on sustainable development has evolved very quickly, in line with environmental, social and economic successes arising from legislated controls, better information, effective programs and voluntary initiatives.

Over the last several decades, Canadian air and water quality have demonstrably improved. Though the acid rain problem is not yet resolved, we have successfully reduced emissions of sulphur dioxide, the key source of acid rain. We have also seen sharp reductions in ozone depleting chemical emissions. To address these and other issues, businesses have invested in environmentally friendly technologies and processes. As a result, the environmental industries sector has burgeoned.

Individual Canadians and communities have also tackled sustainable development issues–ranging from recycling programs and transportation initiatives to wetlands restoration projects. Youth and children are strongly represented in these kinds of actions.
The Government of Canada has shared in this progress toward sustainable

development. Its commitment is reflected through policy statements like *A Guide to Green Government* (1995), and through its actions, such as, establishing the position of Commissioner of the Environment and Sustainable Development and requiring federal departments to prepare sustainable development strategies.

In its most recent Speech from the Throne (1999), the Government expressed its commitment to place greater emphasis on sustainable development in government decision-making, and to make itself a model of environmental excellence in its own operations. The Speech's overall emphasis on improving the quality of life of Canadians reiterates the importance of considering environmental and social issues alongside economic issues in decision-making.

The 2000 Federal Budget demonstrated the government's commitment to advancing environmental protection in the context of a sustainable development approach. Over this and the next three fiscal years, the budget allocates $700 million to strengthen environmental protection and advance sustainable development in Canada. Funds in the budget will be directed to develop new sustainable development technologies and build momentum towards sustainable development in cooperation with provinces, municipalities, the private sector and non-governmental organizations. In terms of the overall investment in sustainable development, when initiatives such as Genome Canada and the regulation of biotechnology are included, the average annual additional investment in the environment is estimated at $240M per year - potentially bringing the estimated annual investment in the environment to over $500M this year and over each the next three years. As well, $2.6B is planned in municipal infrastructure, a portion of which will go towards green infrastructure.

The budget provides important funding to develop a *National Strategy on Species at Risk* and strengthen the federal enforcement of pollution standards in Canada. Two new municipal funds have been created to facilitate sustainability at the community level and a *Sustainable Development Technology Fund* has been established to help develop and demonstrate cleaner technologies with the private sector. Finally, the budget makes a critical investment in the area of sustainable development indicators.

The Government of Canada has also been an active leader at the international level on SD issues. It has actively supported global treaties, built good relations with developing countries and applied SD frameworks to international priorities. Recent budget investments in Canadian International Development Agency and the World Bank Carbon Fund plus support for the Persistent Organic Pollutants Protocol, strengthens Canada's commitment to building the capacity of developing countries.

C. A WORLD OF CHALLENGES

The new world of globalization

While Canada and the world have made important progress on specific SD issues, globalization has revealed more deep-seated challenges that test the capacities of traditional legislative and program strategies.

Globalization has propelled social and economic change with many benefits for human development, including rising standards of living, the emergence of more open,

democratic governments and greater protection of human rights. However, many inequities still exist. The 30% of the world's people in the highest-income countries account for 86% of total private consumption expenditures. The poorest 20% account for 1.3%. In the developing world, nearly 60% of the people lack basic sanitation and about 25% lack adequate housing.

Globalization has also enhanced the risk faced by countries from economic shocks beyond their borders. More than $1.5 trillion is exchanged daily on world currency markets and one fifth of the goods and services produced each year are traded.

Limits to traditional policy choices

Globalization has had a fundamental impact on government policy choices. Territorial borders have become incredibly porous. People, goods, currencies and information move at rates and in quantities that have altered international relations and the effective capacity of domestic and local governments. Citizens demand more influence over public policy agendas and more comprehensive approaches to issues by governments, despite more constrained public sector resources. Thus, the search for mutually reinforcing and coherent responses have become defining features of the public policy agenda.

Population and consumption pressures

Social and demographic changes will influence our economic and environmental future. Canada's population is projected to grow to more than 42 million by 2050, a 40% increase from today's level. That growth will be concentrated in cities and will be substantially fuelled by immigration. Canada is also aging. By 2030, almost 1 of 4 Canadians will be at least 65 years of age. This raises certain issues, including for example, inter-generational equity.

The impacts of changes in the developing world are expected to be more significant in comparison. For example, economic growth to 2025 in China alone could lead to a 17% increase in global greenhouse gas emissions over that period.

Consumption growth will be an important factor in the years ahead. Consumption per capita increased 2.1% annually in industrialized countries over the past 25 years and 6.1% annually in East Asia. Total world consumption doubled between 1975 and 1998, and has risen sixteen fold during the past century. While some consumption involves renewable or replaceable resources, consumption of resources such as fish and fishery products (up 240% since 1960) or withdrawals of freshwater (four times greater in 1990 than in 1940) seems to be testing environmental limits. Increasing production of waste is linked to increasing consumption, especially in countries like Canada.

D. CHALLENGES

The trends outlined above are linked to some of the major environmental, social and economic challenges facing Canadians.

Pollution

Smog remains a health threat in Canada, especially to children and seniors. It is linked to

the increase in asthma that affects more than one million Canadians resulting in 60,000 hospital admissions annually from 1990 to 1993. Air pollution levels are stable, but could rise with growing population, industrial activity and automobile use.

Currently, more than 23,000 chemical substances are used in Canada and more than 1,000 new chemicals are registered every year. While most are not considered a risk, fewer than 70 substances have been subject to an assessment under the Priority Substances Assessment Program of the *Canadian Environmental Protection Act*. This is a concern in light of emerging evidence that certain substances may disrupt the endocrine process in wildlife and humans, as well as the impacts of persistent organic pollutants and other toxics.

Climate Change

Greenhouse gases are accumulating in the atmosphere at an unprecedented rate due, primarily, to rising industrial activity and energy use. The current level of carbon dioxide is higher than any previously detected through geological records for the past 200,000 years. According to scientific consensus, those gases are triggering rising average global temperatures with possibly severe consequences including: more health problems from heat stress, pollution and the spread of new infectious diseases; changes in our ability to grow food; and more frequent forest fires. Addressing this growth is a challenge because greenhouse gases are produced by virtually everyone and in ways that are rooted in the fundamental processes of daily life in industrial societies.

Loss of Biodiversity

Population growth and the widening geographic reach of intensive human activity is degrading and destroying many ecosystems. For example, Canada has lost 60% of its total wetlands since 1963. These ecosystem impacts help to accelerate species loss. In Canada, 339 species of plants and animals are at risk, with 86 of them classed as endangered. The loss of biodiversity in Canada and internationally could affect identification of new foods, medicines and other contributions of well functioning ecosystems. In Canada, 900,000 jobs in agriculture, the $32 billion forest industry, $2.6 billion in fishery exports and $5.6 billion in wildlife activities rely on biodiversity-based natural resources. The ongoing health of these industries and the economic future of thousands of communities across Canada depend on sustainable use of our biological resources.

Trade and Competitiveness

With the liberalization of trade and investment, a key force behind global economic development, the world's economies are becoming increasingly interdependent. Canada's economy is more open than any of the leading industrialized countries. Canada trades approximately 74% of its GDP in both exports and imports combined, and as such must find ways of enhancing the international competitiveness of its companies and of ensuring a fair, open trading system.

Innovation

In the global, knowledge-based economy, the advantage goes to countries that are innovative, have high levels of productivity and quickly adopt the latest technology. The

growth of the Canadian economy in the future will increasingly depend on innovation--on developing the ideas and information on which jobs depend and the skills to use them. Environmental performance is one area that is increasingly affecting the competitiveness of industries in Canada. While leading companies are adopting innovative business approaches that improve both their economic and environmental performance (e.g. eco-efficiency), there are more opportunities for innovation and leadership in this area. Information technology is another example of an area requiring innovation and leadership if companies are to remain competitive.

Culture

Within a culturally and socially diverse country like Canada, and in an increasingly globalized world, there is a challenge in maintaining and enhancing cultural space. Issues of social cohesion, diversity, citizenship, participation, values and beliefs are all important to Canadians and to their quality of life, and these issues are likely to become more, not less complex in the years to come.

Equity

Canada is known around the world for its high quality of life, but increasingly there is a need to consider how all Canadians are sharing in the country's riches. In Canada, the gap between the highest and lowest income earners continues to grow. While the child poverty rate is now dropping slowly in Canada, it remains 50% higher than it was ten years ago. As the global economy and population grow, the challenge is to ensure that all Canadians are able to benefit.

Health

On average, Canadians are now healthier than ever before. There remain, however, critical issues to address in both our physical and social environments. These include, for example, the effects of climate change on health, concerns over food safety, and the need to optimize early childhood development. Other challenges include: changes in the size of the Canadian population, issues of aging, increasing cultural diversity and urbanization; increased risk of importing dangerous products or contaminated foods into Canada with increased trade; and new medical and ethical issues surrounding scientific and technological advances.

E. FINDING SOLUTIONS

Traditional, narrowly focused solutions will not be sufficient to address these and other SD challenges. As the issues Canada faces become more complex, more globally-driven and more interconnected, there is a need to rely more on integrated decision-making. This may be realized through the development and use of new tools that incorporate the consideration of longer-term implications into decision-making. In addition, partnerships between the public and private sectors will be essential.
The Government of Canada's commitment to place greater emphasis on sustainable development in government decision-making is an important step in an effort to find lasting solutions to the environmental, social and economic challenges we face.

Many domestic elements are in place

The federal government appreciates the need to move wisely on approaches to integrated decision-making, given Canada's economy, climate and geography, international realities and the importance of building a cohesive society. Any decisions must preserve the principle of equity between regions. They must take into account our competitive situation, especially relative to our major trading partners and competitors.

The government also recognizes that many industry leaders and Canadian communities are already participating in the effort to implement integrated decision-making principles. Building cooperative relationships with all sectors of Canadian society and learning from the leadership and achievements of others will be an essential part of making progress on sustainable development.

The Government of Canada is updating the *Oceans Act*, implementing the new *Canadian Environmental Protection Act*, conducting the five-year review of the *Canadian Environmental Assessment Act*, and revising the *Pest Control Products Act*. Since 1990, a Cabinet Directive has required that departments undertake a Strategic Environmental Assessment of policy, plan or program proposals that may have significant environmental effects. Important contributions to long-term sustainable development have been made by introducing and enriching the Canada Child Tax benefit, undertaking Canada Pension Plan reform, balancing the federal budget and continuing to reduce the national debt.

In addition, the federal government is making better use of a full range of policy instruments including voluntary initiatives by industry. Important efforts are being made to make information available to people, businesses and communities for improved decision-making, through tools such as Strategis and GeoConnections. Governments in Canada have worked together to build structures like the social union and harmonization frameworks to enable improved federal-provincial-territorial cooperation on issues that overlap jurisdictions.

Canadians expect action

Canadians strongly value the notion of quality of life. Public opinion polling has shown that Canadians place considerably more value on the concept of quality of life than on standard of living. Quality of life is generally understood to be the product of a number of interacting factors including economic, social and environmental conditions. Rather than viewing themselves or their society strictly in monetary terms, Canadians seek a balance of factors in their lives.

Recent polling shows that, when asked, 85% of Canadians are concerned about environmental conditions in Canada and 62% believe that environmental problems affect their health. Polling reveals that Canadians expect solutions to these issues to be

developed promptly and 72% do not believe that environmental protection has to mean higher unemployment. In fact, 81% see technological development opportunities that will benefit Canada economically, as well as environmentally.

The Government of Canada believes that adopting a more integrated approach to decision-making that: focuses on the long-term; fully incorporates social, economic and environmental factors; recognizes the interdependence between domestic and international activities; and promotes partnerships between all sectors of society, will be an important cornerstone in building a stronger quality of life for all Canadians, now and into the future.

Opportunities to move forward in eight priority areas

Building on commitments made in the Speech from the Throne (1999), federal departments have recently committed to work together to coordinate planning in eight SD issue areas of shared responsibility. The areas of focus include:

- Sustainable government operations;
- Knowledge and information/sustainable development indicators and reporting;
- Productivity through eco-efficiency;
- Sustainable development in the international context;
- Federal sustainable development strategy for the North;
- Sustainability at the community level;
- Social and cultural aspects of sustainable development; and
- Sustainable development and healthy Canadians.

These eight areas are seen as a starting point for more coordinated SD planning government-wide. They represent areas where some of the groundwork for a coordinated approach is already in place, and where there is departmental support to move a coordinated effort forward. They are certainly not the only areas that would benefit from a more coordinated approach.

The kinds of opportunities for coordinated action being considered in each of these areas are briefly outlined in the following sections of this discussion document. The intention is to ensure that these eight horizontal initiatives help to inform the sustainable development priorities of individual departments, as reflected in their updated sustainable development strategies, to be tabled in Parliament by December 2000.

COORDINATED SUSTAINABLE DEVELOPMENT PLANNING

1. Sustainable Government Operations - A Strategy for Excellence

Vision

- The integration of the principles of sustainable development into all federal government operational decision-making.

Overview

To play a leadership role on sustainable development, the federal government must work continuously to improve the sustainability of its own operations. A strategy is proposed to facilitate a coordinated approach aimed at ensuring the sustainability of the government's operations. The proposed strategy embraces all aspects of the federal family's operations: from promoting energy efficiency and waste management to water conservation. It touches on the management of a wide range of issues, such as human resources, land, waste and motor vehicles. Among other things, it is intended to promote integrated strategic environmental assessment, as well as the reduction of greenhouse gas emissions.

Opportunities

Environmental concerns were given high profile in the Speech from the Throne (1999), with the federal government vowing to integrate the principles of sustainable development into all decision-making. Through the Throne Speech the federal government made a promise to report regularly to Canadians on sustainability and the unequivocal commitment that "In its operations, the government will make itself a model of environmental excellence."

In response, the federal government is proposing to take a coordinated approach to sustainability which will build on Ministerial commitments made in *A Guide to Green Government*. It will employ a collaboratively developed toolbox of performance measures. It will also set parameters for targets to be considered when departments prepare their sustainable development strategies for submission to Parliament in December 2000.

The goals of the strategy are drawn from the major commitments made in *A Guide to Green Government*:

- Adopt a pollution prevention approach in all operations;
- Meet or exceed requirements of all applicable federal regulations, guidelines and policies;
- Emulate best practices from public and private sectors; and
- Integrate an environmental management system based on ISO 14001 standards into the overall management framework.

The strategy will incorporate best practices from the *Guide* in seven priority areas: procurement, waste management, energy efficiency, water conservation, vehicle fleet management, land use management and human resource management. As actions are taken and targets met, new targets will be set, recognizing that by definition, sustainability is a journey of continuous improvement.

Federal Approach

The federal government's commitment to greening its operations has grown in scope, depth and accountability since it was first articulated in the 1992 *Code of Environmental Stewardship*. The Code states, among other things, that the federal government commits to integrating "environmental concerns with operational, financial, safety, health, economic development and other relevant concerns in decision-making." In 1995, the government took an important step toward translating that commitment into action by amending the *Auditor General Act*.

Given the evolution of its effort to green operations and the progress made with the first round of sustainable development strategies, the federal government is well positioned to re-affirm the principles of *A Guide to Green Government*. There is already consensus around those principles, which have remained valid over time.

Challenges

This initiative involves a number of challenges including:

- **Balancing competing priorities**. The proposed strategy should seek integrated, cost effective approaches.

- **Fulfilling the government's promise to close the gap in environmental protection stemming from the non-applicability of provincial regulations on federal lands.** The federal government has committed to setting the same environmental standards for itself as those which apply in the communities in which they operate. This effort is integral to the harmonization process. The strategy must address the perception that, in its own operations, the federal government is subject to a less stringent regulatory regime than its provincial, municipal and private sector counterparts.

- **Measuring performance.** Over the last two years, the federal government has, through wide consultation, developed a comprehensive set of performance measures in fourteen broad areas of government operations. These tools are integral to the success of the strategy, which must generate results, which can be measured, reported and are capable of being rolled up across departments to provide a government-wide perspective.

- **Maximizing interdepartmental coordination of effort to achieve results**. This must be done in the context of respecting Ministerial autonomy and the right of departments to establish their own sustainability targets.

Path Forward

The federal government could take the following steps, as it establishes priorities and sets directions for sustainable government operations:

- Review feedback from public consultation and make adjustments to sustainable government operations as appropriate;
- Build interdepartmental consensus on the revised strategy;
- Reflect goals, objectives and targets in departmental sustainable development strategies, to be tabled by departments in Parliament by December 2000; and
- Implement actions to meet shared targets and report progress

Questions for Discussion

- Sustainability in government operations means finding an appropriate balance between environmental, economic and social factors. This type of analysis is especially pertinent, for example, as targets for reduction of greenhouse gas emissions are being set. Do you feel the federal government should put greater emphasis on its environmental responsibility in order to show leadership while accepting that this may be more costly monetarily, especially in the shorter-term?
- While the federal government strives for greater coordination in sustainable government operations (e.g. common measures and targets) it must also recognize the autonomy and separate mandates of individual departments. Are there experiences by other organizations that could assist us in meeting this challenge? What level and detail of reporting by the federal government as a whole would you like to see?
- A number of organizations face similar obstacles with respect to greener procurement. Are there strategies you have found successful in advancing environmentally responsible procurement which you could suggest that federal departments incorporate in their sustainable development strategies?

2. Sustainable Development Indicators and Reporting/ Knowledge and Information

a) Sustainable Development Indicators and Reporting for Canada

Vision

- A Sustainable Development Indicators and Reporting Initiative that enables Canadians to determine whether progress is being made toward the goals of sustainable development, and that provides information that assists in making informed decisions in a sustainable development context.

Overview

At a time of increasing globalization and restructuring, decisions are being made that will have significant long-term economic, social, human health, cultural and ecological effects. Sustainable development is about fundamental policy choices affecting our immediate and long-term future. To ensure the right choices, a clear prerequisite is consensual support from policy-makers and representatives of individual sectors as well as society at large. Selecting and using a commonly agreed to "currency" or measurement tool would help build this consensus. At the same time, the measures themselves would communicate the results of implementation and provide the foundation for continuous improvement in advancing sustainable development. Indicators of sustainable development are essential tools for channelling key empirical and quantitative information into policy planning and decision-making.

Developing adequate measurement tools would help to ensure that Canada lives up to its domestic and international reporting responsibilities. This would help the federal government fulfil the expectations of its citizens, and in time, would help Canada regain its international leadership in sustainable development policy-making.

Domestically, the Speech from the Throne (1999) contained a commitment to attain a higher quality of life for all Canadians. It committed the federal government to work with its partners to report regularly on progress in addressing the top environmental concerns of Canadians. In Budget 2000, the federal government announced the provision of $9 million over the next three years to the National Round Table on the Environment and the Economy and to Environment Canada to develop environmental and sustainable development indicators in collaboration with Statistics Canada. The government is also committed to integrated decision-making. Amendments to the *Auditor General Act* (Commissioner of the Environment and Sustainable Development) require that all federal departments and agencies prepare a sustainable development strategy and report on its implementation.

Internationally, the federal government signed *Agenda 21*, a program of action agreed to by 179 nation states during the Earth Summit in Rio de Janeiro. Article 40 of *Agenda 21* calls for countries to develop and use indicators for sustainable development for improved decision-making. The federal government is also obliged to report annually to the United Nations Commission on Sustainable Development.

Without having a concrete set of indicators to report on, it will continue to be difficult to monitor Canada's progress toward sustainable development. Indicators of sustainable development would enhance the capacity of Canadians to:

- Improve planning and make better-informed and responsible decisions;
- Promote improved social, cultural, economic and environmental conditions;
- Anticipate, prevent or lessen environmental and social stresses and related problems that can be costly for society;
- Better allocate limited financial resources on activities crucial to achieve sustainable development;
- Contribute to international discussions aimed at advancing sustainable development; and
- Advance our knowledge of the sustainable development process through the focusing of research and analysis on specific issues and processes (see 2 b) below).

The scope of work in this priority area would include developing:

- A framework for measuring progress toward sustainable development at the national level. Taking stock of the efforts of other organizations, domestic and international, would contribute to the efforts of federal departments to develop a framework for sustainable development indicators for Canada (see 2 b) Overview, below);
- A set of concise, reliable and interlinked indicators of sustainable development. These indicators would encompass environmental, economic and social issues related to the sustainable development goals of all levels of society; and
- A strategy to communicate the results to the public in an understandable and timely way.

Federal Approach

Various federal departments and national organizations are engaged in indicator programs and reporting. These programs focus on one of the three components of sustainable development (the economy, society or environment) or on specific resource sectors or issues (e.g., forestry indicators, agriculture indicators, health indicators, environmental indicators, and so on). Some programs draw links between components of sustainable development (e.g., Statistics Canada's Natural Resource Accounting links environmental and economic indicators). However, no attempt has yet been successful in systematically bringing all components together and in understanding the many inter-relationships among them. An interdepartmental working group is conducting a survey

of all existing federal-level indicator approaches while also reviewing and analyzing national and international approaches in view of identifying an approach relevant to policy-making in Canada.

Challenges

The challenges in sustainable development indicator work are significant and include:

- Building on individual sets of indicators developed by various federal departments and integrating and linking sets of economic, social and environmental indicators to simultaneously track progress toward sustainable development in all three areas, recognizing that complex inter-linked problems require integrated approaches and solutions.

- Incorporating a broader view that goes beyond the federal government's experience by involving stakeholders in designing integrated, national-level indicators. Present measurement activities and indicator designs are too fragmented and narrowly focused. Indicators of sustainable development are not only relevant to individual organizations; they are relevant to all Canadians. There is a need to broaden the debate and to work by consensus.

- Adopting a framework that helps establish the link between the political strategy of sustainable development and the statistical and monitoring measurement system, with a view to ensuring that the indicators are relevant for policy. Such a framework should be consistent with the one mentioned in the Knowledge and Information initiative (see 2 b) below).

- Analyzing the information provided by the myriad of indicators to identify those key ones that assist the policy and planning process.

- Identifying and filling the data gaps that are needed to develop rigorous sustainable development indicators, thus replacing proxy variables with actual ones.

- Fulfilling expectations that the indicators: be scientifically sound and accepted by the experts; be politically relevant and easily understood by politicians and other decision-makers; attract the attention of the media and the public; and be capable of fuelling continuous improvement.

- Building on existing effort in this area, such as the Policy Research Initiative work on sustainable development, departmental sustainable development performance indicators and existing interdepartmental mechanisms (e.g., the Memorandum of Understanding among the five federal natural resource departments) as a basis for integrated reporting.

- Developing a communications strategy that includes regular, timely and understandable reporting through a diversity of dissemination mechanisms and products, designed to ensure that the indicators are well disseminated.

Path Forward

As a first step, the federal government could:

- Develop a framework for measuring national progress toward sustainable development.
- Identify a concise, reliable set of indicators based on their relevance to policies and their interlinkages.
- Test a selection of indicators for their ability to communicate results.
- Develop a simple and open communications strategy of the measures to promote public discourse.

Questions for discussion

- What kinds of indicators would you find useful in understanding sustainable development and our progress towards it?
- Should a layered (tiered) system of indicators be developed? (This means using a first-level set of national indicators of sustainable development; a second-level set of regional indicators; and a third-level set of departmental and sectoral indicators--all of which are interlinked. Consistency is required among the layers. Creating this consistency is a two-way street: the national-level indicators will draw on the existing regional and sectoral sets, while the national set will modify and possibly simplify the lower-level sets.)
- Should indicators be designed that address only existing sustainable development goals and targets and allow for measurement of progress towards them? Should the indicators also be used for forecasting?

b) Knowledge and Information

Vision

- Development and maintenance of a comprehensive sustainable development (SD) knowledge and information base, supported by a strategy where:

  - Data/information development addresses concepts and definitions, the on-going identification of needs and gaps, and the creation of new data as needed. Ultimately, this information base would provide the data/information required for the development of SD indicators (see 2 a) above).
  - Data/information management is based on an information management infrastructure that facilitates the handling and use of data and information, and minimizes barriers to information sharing and transfer.
  - A sustainable development research program identifies needs and gaps in research domains as well as capacity for both natural and social sciences and coordinates and implements research agendas that address SD issues. The long-term strategy for this component could include collaborative initiatives focused on increasing sustainable development knowledge through academic research.
  - A communication and dissemination strategy provides regular and timely release of information to decision-makers and to the general public. The strategy would include, but not be limited to, reporting activity described in the SD Indicators and Reporting priority issue (see 2 a) above).

Overview

The availability of knowledge and information and their communication is crucial to sound decision-making. Canada's current sustainable development information and knowledge base is inadequate to provide the foundation for informed public debate and for the promotion of knowledge-based decision-making. Canadians expect the federal government to play a leadership role in providing information and knowledge. The creation, management and communication of the sustainable development knowledge and information necessary to decision-makers and the general public are priorities that would benefit from government-wide coordinated planning and implementation.

There is a need for a conceptual framework that integrates all of the elements of sustainable development, as well as an institutional framework to deliver sustainable development knowledge and information. The following knowledge and information activities should be covered in these frameworks:

- Data/information collection and management
  The existing information related to sustainable development tends to be dispersed and uncoordinated. There is a need to assess information requirements and gaps, to coordinate the collection of new data and information, and to develop an information management system that integrates sustainable development information.

- Sustainable development research
  This involves the development and implementation of coordinated research agendas

that address sustainable development issues. The research could cover activities ranging from basic research in the natural and the social sciences, to policy research.

- Communication and dissemination
  The ultimate objective of the knowledge and information initiative is to provide the foundation for better decision-making and informed public debate on sustainable development issues. For this to happen, all of the above activities need to be tied to an effective communication and dissemination strategy.

Opportunities

There are some areas of opportunity upon which work on this priority issue could build:

- Availability of information/data - Stakeholder participation
  Provinces/territories, municipalities, and the private sector must be involved, as there is a role for them in providing complementary information. One example already under way is the GeoConnections/Geo-partners federal-provincial program.

- Sustainable development research
  The Social Sciences and Humanities Research Council is receptive to the concept of sustainability as a targeted research program and suggested that a proposal be developed for a medium to long-term research program.

Federal Approach

A number of recent federal initiatives address elements of the sustainable development knowledge and information theme. These include, but are not limited to:

- The federal government is funding GeoConnections over five years, with a view to making comprehensive and integrated earth-related and geospatial data available, in response to the need for enhanced sustainable development information and knowledge.

- The Memorandum of Understanding between Environment Canada, Natural Resources Canada, Agriculture and Agri-Food Canada, Fisheries and Oceans and Health Canada on Science and Technology for Sustainable Development is a platform from which federal capacity for sustainable development research can be strengthened.

- The Canada Foundation for Innovation provides financial support to universities, research hospitals and not-for-profit institutions and organizations, for the modernization of research infrastructure in the areas of health, environment and science and engineering. The 2000 Budget provided $900 million to the Foundation. This new funding brings the government's total investment to $1.9 billion and will support continued awards until 2005.
- Statistics Canada's recently released Canadian System of Environment and Resource Accounts (CSERA) offers a possible framework for integrating environmental and economic statistics.

- The current work agenda under the federal government's Policy Research Initiative Sustainability Project can serve to identify future research needs and a comprehensive policy research agenda.

Challenges

This broad initiative involves a number of challenges including:

- Institutional framework
  - Creating an institutional framework to coordinate activities and ensuring a consistent perspective across government on the research capacity challenges related to sustainable development.

- Information management
  - Reaching agreement on a framework that deals with the entire information management process including content, a performance tracking system, and a common information technology infrastructure. In this regard, the Federated Architecture Initiative led by Treasury Board will be an important contribution to the development of meta standards and search protocols.

- Sustainable development research
  - Balancing research in natural and social sciences as well as basic theoretical and policy research.
  - Ensuring a consistent perspective across government on the research capacity challenges related to sustainable development.
  - Reaching agreement on appropriate roles of different institutions (e.g. federal government, universities, private sector) and on appropriate focus for sustainable development.
  - Balancing assessment of research to meet current needs versus future challenges and needs.

- Access to information and maintenance
  - Ensuring timely updates of the information, addressing security and privacy considerations, as well as cost recovery options.

Path Forward

Some of the steps that could be pursued include:

- Defining objectives, scope and next steps, which could occur through a workshop.
- Developing a conceptual framework, which could be facilitated through the preparation of a discussion paper.

- Assessing needs based on the conceptual framework, including the need to develop SD indicators (see 2 a) above).
- Defining concepts, including those related to standards, definitions, documentation, information storage format.
- Conducting an inventory of existing data/information and knowledge, including examining Environment Canada databases like those related to species, atmosphere, weather and the National Pollutant Release Inventory, as well as the data bases of other government departments (e.g. the collective data base of the five natural resource departments), provinces, institutes and other non-government organizations.
- Identifying gaps based on the needs analysis and inventory.
- Analyzing systems needs, including designing and implementing parameters for information management systems for collection, storage and dissemination.
- Exploring and recommending whether institutional options are required.
- Providing costing options for systems development, including cost estimates for possible new data surveys, institution creation, and operation and dissemination.

Questions for Discussion

- Should environmental accounts be created that do for the environment what the National Accounts do for the economy? Is this a reasonable approach? Would it lead to a suitable conceptual framework for sustainable development? How should it be pursued?

- What should be the outcomes of the sustainable development information/data system?

- What should be the initial research domains of the sustainable development research program?

3. Productivity through Eco-efficiency

Vision

- Moving Canada toward more sustainable production and transportation of goods and services by facilitating the adoption of innovative and measurable eco-efficient practices and technologies.
- Identifying the economic and environmental gains that accrue from eco-efficiency and innovation investments, and hence, creating an incentive for the adoption of such practices by industry.

Overview

Productivity is the most important determinant of a country's standard of living. However, over the last twenty years productivity in Canada has under performed across various measures. For example, the level of labour productivity in Canada declined from second to fifth place among the G-7 nations, and the gap in manufacturing productivity with the United States has widened. Organization for Economic Cooperation and Development (OECD) studies suggest that innovation and productivity go hand-in-hand and that Canada also has an innovation gap. The implementation of eco-efficient practices and technologies could complement government efforts to make Canada more innovative and productive.

Eco-efficiency is an important business practice and management tool. It provides business with the means to increase productivity and competitiveness while making measurable progress towards improved environmental performance. Eco-efficient practices as defined by the World Business Council on Sustainable Development (WBCSD) include:

- Reducing the material intensity of goods and services;
- Reducing the energy intensity of goods and services;
- Reducing the dispersion of toxic materials;
- Enhancing the recyclability of materials;
- Maximizing the use of renewable resources;
- Extending the durability of products; and
- Increasing the service intensity of goods and services.

The benefits of eco-efficiency are being realized by leading firms from a variety of sectors, including agriculture and agri-food, mining, forestry, chemicals, petroleum, life sciences, electronics, consumer goods, and others. Their eco-efficient improvement strategies typically involve innovations in technology, production processes, product design, and business organization and practices that can lead to productivity gains. Companies that have invested in eco-efficient practices have experienced such benefits as lower per unit costs, improved product/service quality, enhanced brand image and customer loyalty, new market opportunities, lower environmental-related liability, and increased interest by investors and the financial community. Other benefits include reater worker pride and job satisfaction, as well as contributions to broader productivity that can lead to improvements in living standards and quality of life.
Many intergovernmental organizations are making eco-efficiency a key part of their work to improve the competitiveness and environmental performance of industry. The

European Commission, in partnership with the WBCSD and other industry groups, has launched a multi-year action plan to promote eco-efficiency as a leading business and policy concept across Europe. Individual countries are working through organizations such as the OECD to examine experiences with government programs and initiatives by individual firms aimed at improving eco-efficiency.

While many large companies in Canada have adopted some eco-efficiency practices, few Canadian firms are in the forefront of eco-efficiency innovations. There is a lack of understanding of the formal concept of eco-efficiency as a management tool and its benefits, particularly by small and medium sized enterprises (SMEs). A more systematic approach to adoption of eco-efficient practices and technologies by Canadian industries and renewable resource sectors could yield significant benefits in terms of improved competitiveness and reduced environmental risk. It could help ensure Canadian industry maintains its competitiveness in global markets where access is increasingly being shaped by environmental issues (e.g. Western European consumer markets).

Opportunities

A comprehensive set of initiatives could flow from four strategic areas related to eco-efficiency and related innovative tools. Many would respond to impediments that reflect broader productivity improvement challenges such as the predominance of small and medium-sized businesses, low appetite for innovation and risk, and limited knowledge.

- Developing the knowledge infrastructure through measures, such as: improving our educational and research institution capacity; developing a network of expertise to link partners in the public, private and voluntary sectors, as well as the research community engaged in eco-efficiency activities; greater use of e-commerce; and promotion of environmental management systems including ISO 14001 standards throughout the supply chain of major economic sectors.

- Promoting education and awareness through measures such as benchmarking eco-efficiency, information products on eco-efficient production processes, practices and transport, and initiatives and tools that could provide individual analysis for SMEs.

- Encouraging the development and diffusion of eco-efficient technologies and products through the use of programs that support R&D and commercialisation.

- Influencing the business environment through policy development including: renewal of the Accelerated Reduction/Elimination of Toxics program and new memoranda of understanding with key industry sectors; developing incentives including initiatives recognizing industry efforts; consumer education including improved environmental labelling and consumer information; and action in international fora to facilitate access for SME's to reach foreign markets with their eco-efficient products and services.

Federal Approach

Agriculture & Agri-Food Canada (AAFC), Environment Canada (EC), Health Canada (HC), Industry Canada (IC), Natural Resources Canada (NRCan), National Research Council (CNRC), and Transport Canada are increasingly focussing on eco-efficiency as

an important contributor to innovation, productivity and environmental performance. A number of studies and pilot projects with industry have been undertaken to explore the concept, as well as the best role for government in the promotion of eco-efficiency. Several departments, led by NRCan, are currently funding a study examining leading business cases, the role national governments are playing, and barriers to adopting eco-efficiency. The National Round Table on the Environment and the Economy, EC, IC, NRCan, AAFC and HC have also been supporting work on eco-efficiency indicators. Pilot projects have focussed on helping SMEs implement eco-efficient practices through partnerships involving the CNRC, IC, NRCan, Business Development Bank of Canada and others.

Challenges

Some of the challenges related to the achievement of further progress in the use of eco-efficiency practices include:

- Demonstrating measurable economic and environmental benefits to industry and other institutions. Organizations, particularly those at the compliance stage and in the SME sector, still see the environment as a cost centre as compared to an opportunity to increase profitability and competitiveness. More exposure to successful examples in their sector or from other sectors plus technical assistance in identifying opportunities is needed to engage industry more.

- Better preparing Canadian universities to lead in innovative research and teaching. Opportunities exist for them to upgrade their knowledge base in terms of the latest environmental tools and management systems, including eco-efficiency, and related areas such as life cycle assessment and eco design. Currently, the majority of research in this area comes out of the United States and Europe.

- Examining the potential barriers to eco-efficiency, such as regulations that inhibit the transboundary movement of waste as well as the development of co-generation facilities.

- Exploring incentives (e.g. programs) to encourage the introduction of new eco-efficient technologies.

Path Forward

Steps to be taken in the path forward include:

- Conducting an inventory of relevant federal activities.
- Developing a federal discussion paper on eco-efficiency.
- Developing a framework to guide eco-efficiency initiatives in federal departments.
- Developing a strategy involving partnerships and communications with the private sector.

Questions for discussion

- How does eco-efficiency connect with other business goals such as competitiveness and productivity?
- What is the role for the federal government? Should the focus be on selected industry sectors or should a more generic approach be taken? How does the federal government engage small and medium-sized businesses?
- What role would industry, particularly firms that are leaders in eco-efficiency, be willing to play in partnering with the federal government?
- How should the federal government go about upgrading the supporting knowledge infrastructure in this area, for example, networks of eco-efficiency expertise, universities, capacity of research institutions, employee skills?

4. Sustainable Development in the International Context

Vision

- A country that:
  - Actively supports international efforts to address sustainable development concerns;
  - Works with others bilaterally or through regional and global fora to develop solutions, recognizing the global nature of environmental issues;
  - Brings a coherent approach to international challenges, whether these be in the field of human rights or human security, as affected by conflict, disease, environmental disasters or political and economic upheaval;
  - Develops and relies upon models of best practices; and
  - Promotes cooperation between developed and developing countries.

Overview

At the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, Canada committed itself to the goal of sustainable development. Since that time, a growing appreciation of the linkages between the environment, the economy and social development within Canada and in the global context has influenced Canadian efforts in the international arena. It has also influenced the definition of domestic policies as global issues are driving forces for Canada's domestic agenda. These issues include, for example, biosafety, water resource access, climate change, production patterns, consumption patterns, poverty alleviation, movement of refugees, and international health threats.

The interdependence of all factors of development within Canada is complex. It is even more so in the global context. Some of the key issues for Canada in the international arena include:

- globalization and competitiveness;
- the critical importance of the United States-Canada relationship;
- environmental concerns, in particular climate change and persistent organic pollutants;
- regional conflicts and their impact on human security, movement of people and environmental damage; and
- the trade-environment interface.

Federal Approach

Canada's domestic and international activities in support of sustainable development reflect our commitment to the principles and agreements reached at the Rio Earth Summit. Federal activities related to this priority issue include:

- Actively participating in international institutions that are assuming a growing role in the resolution of global or regional sustainable development problems including, the United Nations Commission on Sustainable Development (CSD), the North American Commission on Environmental Cooperation (CEC), the Asia-Pacific Economic Cooperation forum (APEC), the Organization of American States (OAS), the Summit of the Americas, the Organization for Economic Cooperation and Development (OECD) and the G-8. In addition, Canada is active in the World Trade Organization (WTO) Committees on Trade and Environment and Trade and Development, created to deal with sustainable development in a trade context.

- Responding to global issues affecting sustainable development, such as poverty, equity, basic human needs, good governance and political stability, through Canada's development assistance.

- Building international consensus on human security issues such as the treaty to ban landmines, good governance, conflict prevention and the creation of the International Criminal Court. Canada's approach to policy and programming on human rights and democratic development is an example of the importance we place on ensuring that human rights are an integral part of development initiatives.

- Establishing the Commission for Environmental Cooperation (CEC) with the United States and Mexico, which is monitoring the environmental effects of trade liberalization under the North American Free Trade Agreement. The CEC works on projects under four broad categories that contribute to sustainable development: environment, economy and trade; biodiversity conservation; protection of human health and the environment; and law and policy.

- Working in the WTO to remove trade restrictions and distortions, recognizing that an open, non-discriminatory efficient trading system is vital to achieving sustainable development.

- Participating in the review of the OECD Guidelines for Multinational Enterprises (MNEs), a voluntary code of conduct that encourages safeguards for the health and safety of workers, environmental protection, and advancement of human rights in the communities where they do business.

- Working with industrial and developing countries to encourage the development of domestic measures such as appropriate monetary policies, and financial and economic reforms that will contribute to global stability. World economic developments, such as the financial crisis in Asia, underscore the importance of sound economic policies and financial market mechanisms both at domestic and international levels.

- Participating in the negotiation of a multilateral agreement at the OECD to encourage common environmental guidelines for export credit agencies. As part of that process, member countries have agreed on a Statement of Intent, as well as the exchange of environmental information for large multi-source projects.

- Signing the Kyoto Protocol to the Climate Change Convention in 1998. The focus is now on international elaboration of the rules for the Kyoto mechanisms along with a compliance regime, and preparation of a Canadian implementation strategy. Canada is also working to assist developing countries in their efforts to begin taking action on climate change.

- Conducting negotiations on the Global Convention on Persistent Organic Pollutants (POPs), to address the serious health and environmental threats they pose, particularly in the North.

- Participating in the negotiation of the UN Straddling Stocks Convention, as well as the recently concluded Biosafety Protocol that regulates the increasing transboundary movement of living, genetically modified organisms and their impact on biological diversity.

- Championing the negotiation of an international convention on forests that eventually became the Non-Binding Statement on Forest Principles. Canada launched the Montreal Process for developing criteria and indicators of sustainable forest management for boreal and temperate forests, and the International Model Forests Network. Canada co-sponsored the Malaysia-Canada process in 1994 that relaunched the international dialogue on forests, and the Costa Rica - Canada process that discussed the development of a legal framework for forests in 1999. Negotiations at the UN Intergovernmental Forum on Forests have recently recommended the creation of a new UN Forum on Forests and a supporting Secretariat and Inter-agency Group to work on the development of a mandate for a legal framework on forests within five years, and to work on financial and technology transfer issues.

- Contributing (over $140 million since 1992) to the Global Environmental Facility (the GEF), jointly managed by the World Bank, United Nations Environment Programme and United Nations Development Programme, which has become one of the principle sources of multilateral funding to address ozone depletion, climate change, biological diversity and international waters issues.

- Actively participating in the elaboration and implementation of treaties and rules in areas as varied as chemicals, air pollution, ozone depletion, biological diversity, energy and waste management.

- Promoting sustainable development principles in the field of northern foreign policy, Arctic and aboriginal affairs, directed at achieving better partnerships internationally, particularly through the Arctic Council. Canada was instrumental in establishing the Arctic Council in 1996 as a high level forum to promote cooperation among circumpolar states in their efforts to address common Arctic concerns. In 1998 a sustainable development program was established that includes a range of specific

initiatives focussing on tele-medicine, eco-tourism, fisheries management, and Arctic children and youth. These efforts also reflect the importance of indigenous and traditional knowledge in the management of economic, social and environmental issues facing the North.

- Working with companies, governments and interested non-governmental organizations to promote the concept of corporate social responsibility, including working with Canadian companies doing business overseas to help them promote, develop and implement voluntary codes of ethical conduct.

- Providing leadership as president of the Intergovernmental Forum on Chemical Safety which has led to strengthening of both national and international efforts to achieve the environmentally sound management of chemicals in partnership with other governments, international organizations and non-governmental organizations.

Challenges

A growing awareness of the horizontal nature of sustainable development issues, combined with the recognition that success in the advancement of sustainability requires an integrated approach to planning and decision-making, will be the critical challenge for the twenty-first century. The obstacles are numerous and include, for example, meeting the Kyoto Protocol greenhouse gas emission reduction targets, influencing change in the European Common Agricultural Policy, and halting the continuing depletion of many of the world's ocean resources.

Additional challenges include:

- Broadening the approach to ensure effective cooperation
  Development assistance remains the primary avenue through which Canada can help to advance sustainable development practice for most of the world's people. However, development assistance itself is evolving, bringing together more effectively a variety of actors with a common commitment to sustainability.

- Working for measurable results from Rio+10
  The 1992 Earth Summit was a major international event that created considerable expectations, many of which have not been fulfilled. The format and outcome of Rio + 5 in 1997 was generally perceived as disappointing. Rio+10 provides an opportunity to revive the spirit and momentum of the Earth Summit. However, to be successful, Rio + 10 will require a thorough, well-conceived preparatory process, involving a broad range of international stakeholders. The objectives for Rio + 10 will have to take into account the fact that the world has changed considerably since 1992. At the same time, Canada will be prepared to participate actively on issues of particular concern to Canadians to secure our national interests in an increasingly complex global community.

- Increasing policy coordination and integrated decision-making
  Integrating policy formulation and improving coordination at both domestic and international levels are essential to creating mutually consistent policies and rules that lead to sustainable development. The failure of countries to coordinate

domestic policy formulation is often related to lack of capacity or resources. Domestically, Canadian policy formulation is based on interdepartmental discussion following consultation with the provinces, territories, NGOs and industry to ensure that a broad range of views is considered. Internationally, donors must better coordinate their activities to maximize the impact of limited resources. Strengthening co-operation among international institutions (i.e., the International Monetary Fund, World Bank, WTO and UN bodies) is also important in assuring a coordinated global response to global problems.

- Understanding the inter-relationship between economic, environmental and social policies

  Understanding the linkages between various elements of sustainable development, including trade liberalization, investment, development, labour, human rights and environmental protection is essential to meeting the challenges posed by the cross-cutting nature of these issues. Systematic analysis of a proposed policy or plan can contribute to sustainable development by identifying potential environmental consequences and providing an opportunity to minimize possible negative effects. Other issues include difficulties in obtaining the necessary data, especially from developing countries, and the need for further work to develop better methodologies.

- Enhancing the participation of developing countries in trade expansion opportunities

  Trade expansion opportunity is one of the impacts of globalization that has benefited Canada. Ways need to be found to ensure that developing countries benefit too.

Path Forward

The Speech from the Throne (1999) set out possible next steps, including:

- Cooperating with developing countries in capacity building through the transfer of technology, innovation, know-how, infrastructure, models of best practice, and funding so they can participate in sustainable development practices. This includes capacity development for multilateral environmental agreements and tools such as strategic environmental assessment and environmental impact assessment.

- Fostering greater international cooperation in the development of education and knowledge infrastructure.

- Giving prominence to human security in Canada's foreign policy, and promoting diplomatic policies that encourage expanding the focus of international arrangements to include the well-being of people, as well as the well-being of the state.

- Working to secure international agreements to protect the rights of children and eliminate their exploitation.

- Working with partners to meet our country's international commitment to address climate change by reducing greenhouse gases.

- Building a foreign policy for the North to promote co-operation, trade and security and to protect the environment.

- Working to support the diversity of cultural expression around the world, as well as maintaining and projecting Canada's values abroad.

In addition, Canada may choose to work toward:

- Developing international regimes for environmental practice that promote high standards and assure international consistency.

- Developing effective responses to the agricultural support programs of other countries that provide levels of subsidization that make Canadian products uncompetitive in international markets.

- Attracting both domestic and foreign investment through international collaboration on research, science, technology and market development.

Questions for Discussion

- What are the three most pressing sustainable development issues that Canada must address in the international context?

- How do you see the private sector, industry and governments interacting to address these issues?

- Combatting poverty in the global context demands greater coherence between our cooperation policies and other policy areas. How can the federal government promote policy coherence domestically to improve, for example, frameworks for international trade, investment and capital flows to developing countries, appropriate responses to environmental and social concerns, and the effective participation of developing countries in international negotiations and system building?

5. Federal Sustainable Development Strategy for the North

Vision

- A North where collective decision-making processes, recognition of land claims settlements and excellence in resource management are achieved through policies and programs that will serve as models in Canada and internationally.
- In the long term, the promotion of sustainable development through a strategy that integrates actions of all players, including the federal, territorial and Aboriginal governments.

Overview

A Sustainable Development Strategy for the North has been proposed to integrate the northern objectives and actions of federal government departments. Such a strategy would:

- Respond to the request by northerners during consultations in 1997 for a coordinated approach to sustainable development;
- Promote effective federal government responses to complex northern issues and challenges in a sustainable manner (e.g. resource development, land claims, environmental protection, environmental assessment);
- Identify and take advantage of opportunities to deliver and influence other international, national and departmental agendas, and make direct linkages between the northern sustainable development agenda and other programs;
- Introduce a coordinated style of consultation that provides the federal government with one voice in the North;
- Allow for better co-ordination among various levels of government; and
- Increase awareness about sustainable development issues and federal programs.

The scope of the proposed Strategy is limited to the areas of federal mandate and jurisdiction in the North. The geographic scope of the consultations for the Strategy is limited to the three territories although some departments will also apply certain actions to the northern parts of the provinces. The constitutionally protected land claims and self-government agreements are paramount. If there is any inconsistency between these agreements and the Federal Sustainable Development Strategy for the North or departmental strategies, the agreements will prevail.

Opportunities

A Federal Sustainable Development Strategy for the North provides an opportunity to:

- Focus attention on northern issues and objectives.
- Integrate social, environmental and economic values, particularly those of northerners, in federal planning, implementation and decision-making.
- Satisfy requests by northerners for a coordinated federal approach that includes common objectives across departments and promotes teamwork among federal government departments, with a view to reducing overlap and increasing the efficiency and effectiveness of the federal government in the North.
- Take into consideration areas of land and water having special natural and cultural value at the same time as clarifying the options available to industry for access and development. The Strategy should aid in the mitigation of the impacts of climate change on the people and the land. It should lead to greater knowledge and subsequently identify actions to reduce threats to the Arctic environment from man-made pollutants.
- Increase northern control over programs and activities in the North. With increased control northerners will become increasingly accountable for the outcomes of their decisions.
- Facilitate coordination of facets of non-renewable resource development and the management of renewable resources (e.g., the assessment of the social and environmental implications of such developments as the pipelines proposed for the Fort Liard area and the Mackenzie Valley; the diversification of economic activity to reduce the possibility of boom and bust economies; and community training so that local people can benefit). The opportunity exists to ensure that the impact of the activity on both Aboriginal and non-Aboriginal cultures is assessed. Means of applying traditional knowledge, along with western knowledge, to decision-making can be identified.
- Facilitate ways of building sustainable communities, be it through attention to the capacity of northerners to take advantage of local employment opportunities, increased replacement of non-renewable energy sources by renewable energy, sharing of information through expansion and upgrading of appropriate communications infrastructure, physical safety of the people in northern communities, or the security of women, children and the disabled in those communities.
- Support and link Canadian activity with various international commitments of the federal government. For example, Canada is active in the five working groups of the Arctic Council: Arctic Monitoring and Assessment Program; Conservation of Arctic Flora and Fauna; Protection of the Arctic Marine Environment; Emergencies Prevention, Preparedness and Response; and the Sustainable Development Working Group. Canada is leading the initiative on The Future of Children and Youth of the

Arctic. Sustainable development is also integral to the work of a number of pan-Arctic and international organizations (e.g. Barents Euro Council, the United Nations Environment Program). International agreements that build in sustainable development principles and specific international commitments can also be supported by actions in the northern strategy.

Federal Approach

A multi-departmental team, supported by smaller teams in each territory, identified the scope of the Strategy. They suggested a thematic approach based on the following set of sustainable development goals:

- Support and enhance healthy human and natural northern environments.
- Support the development of new governance systems and political restructuring in the North.
- Promote the sustainable utilization of northern natural resources.
- Help build stronger communities in the North.
- Build sustainable development into our international activities.

The first phase of consultations (meetings and telephone consultations) began in November 1999, preceded by announcements and the distribution of a discussion paper. During the consultations, participants have been asked if they agree with the thematic approach, whether these are the correct themes, and whether they cover the main areas that should be the focus of federal programs and activities in the North.

Challenges

The following are some of the challenges posed by this priority issue:

- Developing a common federal vision for the North, given the diverse mandates of the federal government departments.

- Increasing the level of attention paid by the federal government to a sparsely populated area that covers more than 40% of the country. A few departments have programs that are specifically for the North. Some departments with major northern programs have a regional presence, but many service the North from other parts of the country or on an ad hoc basis.

- Improving education concerning the rights of Aboriginal peoples and the processes for implementing settlements. There is a limited understanding of the land claims settlements by the beneficiaries as well as by public servants. This sometimes results in inappropriate action.

- Finalizing land claims settlements and implementing them so that there is greater incentive to invest in the North. A new territorial government that is gaining capacity and confidence, expectations of devolution of responsibilities to the other territorial governments, and new self-government legislation contribute to raised expectations as well as much uncertainty, particularly among developers.
- Improving the coordination and integration of activities in the North. New resource management legislation involving establishment of a large number of new resource management boards and councils, land use planning commissions and other

agencies and organizations has led to a certain degree of confusion and multiple jurisdictions.

Path Forward

- Completion of a Sustainable Development Strategy for the North based on the outcome of further consultations and the content of departmental sustainable development strategies.
- Finalization and implementation of land claims and self-government agreements.
- Reduction in any confusion resulting from the large number of resource management jurisdictions.

Questions for Discussion

- Do you have suggestions on how the federal government might improve the process to ensure that this Strategy has a real and enduring impact on sustainable development in the North?
- Are there other useful approaches for the creation of sustainable development strategies on a geographic basis? Are there examples of other multi-jurisdictional initiatives, not necessarily related to sustainable development, from which the federal government could learn?
- Do you think this initiative can be effective in helping to deal with complex northern issues in a more coordinated manner which goes beyond individual departmental mandates? Do you have other suggestions?

6. Sustainability At The Community Level: An Integrated Federal Approach To Working With Communities

Vision

- Measurable improvement to the well-being of communities through federal contributions that include linking and advancing the social, environmental and economic development of communities through capacity and knowledge; and supporting communities' efforts to take a leadership role in determining their own sustainable future.
- Application of new and innovative approaches to serve Canadians and their communities within the context of government-wide priorities and departmental mandates.
- Development of working models that address coordination in the areas of capacity building, horizontal programming and establishing partnerships at the community level.

Overview

A "community" can include people situated in a specific geographical area (urban, rural and/or northern) or communities of interest. Sustainability in this context refers to community quality of life as evidenced by a prosperous economy, a vibrant and just society and a healthy environment for current and future generations. A "sustainable community" thus empowers itself to achieve a hopeful and common vision for the future, and effectively responds to change through community-based, integrated decision-making, increased resilience and economic self-reliance, and sound environmental stewardship.

Some communities are undergoing unprecedented change and are faced with complex social, environmental and economic challenges (e.g., downturn in rural communities, loss of traditional industries, environmental degradation, out-migration, lack of access to technology, seasonal unemployment). They may also be faced with emerging opportunities (e.g., information and other technologies, value-added industries, tourism, community renewal). Canadians are becoming more proactive in addressing these challenges through community-based initiatives and comprehensive planning. As communities make the connection between economic, social and environmental pressures, they look for similarly integrated support and responses from government at both the local and national levels, as well as a more meaningful interface with government at the community level.

Many global and national aspects related to sustainable development may appear distant and complex at the individual and community level. Local community issues may appear remote in a national context. At the same time, many communities recognize critical economic, social and environmental issues and their inter-connectedness, for which they look to the federal government for support, including information, support for skills and capacity building, investments and direct participation. This is certainly true for

many rural and remote communities, and is already inherent in the government's commitments to Aboriginal peoples and to rural Canadians through Gathering Strength and the Federal Framework for Action in Rural Canada (respectively).

At a macro-level, the federal government plays a significant role in community sustainability through its policies and programs. Issues such as energy efficiency, economic incentives, tax reforms, transportation policy, infrastructure programs and child poverty cannot be dealt with solely at the community level, and can have major impacts on the level of sustainability that communities can achieve. Communities have indicated (e.g. through the Rural Dialogue) that a major barrier to local action is lack of coordination among governments, and among federal departments.

Sustainable development, sustainable communities, capacity building and citizen engagement are closely connected concepts. The federal government recognized the importance of strong communities and engaging citizens in the Speech from the Throne (1999). Issues facing communities are increasingly complex and Canadian communities are playing an increasingly active role in addressing these concerns. How do we build stronger communities? What is the role of the federal government? While many are re-thinking the role of government, it is clear that government should be considering how it should support community sustainability in a coordinated and cohesive manner.

The federal government needs to support sustainable community development in a more comprehensive manner to increase local capability to participate in a more knowledge-based economy, and to strengthen social capital and link economic and social development. The government has many effective community-based programs in place already, often designed to enhance certain capacities. A more clearly defined community-based approach, centred on integrated delivery of policies, programs, and services and participative decision-making, would enable the government to support community development and action in more comprehensive and effective ways and with better linkages to national and local priorities.

Opportunities

To enhance its contribution to community sustainability, the federal government could:

- Build internal capacity by increasing knowledge of community issues, sharing best practices, and improving understanding of existing mechanisms.

- Help connect communities with one another and with government, and provide ready access to: scientific expertise and training in mobilizing resources; opportunities to exchange ideas and best practices; on-line tools to generate and share community knowledge; and integrated environmental, economic, health and social information across federal departments and other centres of expertise.

- Facilitate community capacity building by providing tools that would allow communities to generate and share their own knowledge; develop and build on skills and assets; improve dialogue and achievement of results at the community level; and strengthen regional-specific policy and applied research.
- Co-ordinate key federal players and create synergies by working interdepartmentally

to bring the appropriate federal information and expertise to community initiatives, and improving delivery of programs and communication (e.g. Rural Partnerships Teams).

- Involve other key players by providing leadership and acting as a catalyst to bring the "players" together to form the appropriate partnerships for the projects, including partners such as the Federation of Canadian Municipalities, provinces, aboriginal communities, non-government organizations, the private sector and academia.

Federal Approach

The federal government is committed to listening to what communities have identified as their needs to become sustainable: access to information, funding, tools, knowledge, infrastructure, expertise and skills. There is a range of federal government initiatives that seek to develop the capacity of communities to address various social, economic environmental and quality of life priorities. These initiatives are intended to engage communities, provide information and enhance capacity to use more integrated decision-making approaches to set and act on their own goals. Enhanced coordination and integration of these programs would improve effectiveness and address all dimensions of sustainability. Steps in this direction are being taken.

Relevant federal government initiatives include ecosystem initiatives (e.g., Great Lakes 2000, St. Lawrence Vision 2000 and the Georgia Basin Initiative), the Model Forest Program, the Canadian Rural Partnership initiative, the Community Animation Program and Community Action Program for Children, Gathering Strength capacity building initiatives, Smart Communities, Community Futures, the National Child Benefit Program, the Community Access Program and GeoConnections (which includes a Sustainable Communities Initiative).

Another example is the Sustainable Communities Initiative in Nova Scotia, a collaborative effort among fifteen federal departments under the auspices of the Federal Council, and a similar number of provincial agencies in Nova Scotia. Together, the two levels of government are designing a collaborative initiative to establish an effective government-community relationship, which is being tested in two 'partner' communities in Nova Scotia.

Challenges

Some of the key challenges in this priority area include:

- Effectively communicating with Canadians, given the complex nature of sustainability issues. There is a need to ensure that information and knowledge flow between government and citizens and among communities. The government's "connectedness" agenda needs to be supported by concrete tools to help communities play a key role in the new knowledge-based economy. Work is needed to develop innovative tools, that meet community assets and respond to community needs for integrated decision-making. These tools will need to make existing technology available such as, multi-media enhanced Web sites, geographic information systems, cumulative impact methodologies, remote sensing, etc. At the same time, people are needed "on the ground" to work with communities and to help ensure that all the tools available from the federal government are effectively used in

responding to community needs. This also recognizes the reality that a large number of citizens will not be able to take advantage of Internet-based approaches.

- Community planning should be more comprehensive and integrative in looking at social issues (e.g. health, literacy), economic issues (e.g. industrial development) and environmental issues (e.g. pollution, eco-efficiency and stewardship), and in determining indicators of sustainability relevant to individual communities' circumstances and values, and in establishing a means of measuring progress.

- Developing a shared understanding and vision within the federal government of what we can contribute to meeting community-identified needs and priorities and the capacity to deliver. Also, a consistent view at all levels of government is needed of what community engagement means, including the recognition that this means becoming real partners with communities in information sharing and, especially, decision-making.

Path Forward

- A potential approach to meeting the challenges posed by this priority issue is to develop a government-wide framework for community sustainability. The framework could:

  - identify the federal activities in Canadian communities and provide community profile guidelines (e.g., geography, culture, social, economic dimensions, physical systems);
  - describe characteristics of a sustainable community (i.e., indicators of success); and
  - provide criteria and a process to identify possible partner "sustainable communities" for integrated initiatives.

- This process could be community-led, in terms of visioning, planning, development, and implementation. In addition to facilitating federal coordination, such a framework could:

  - facilitate the creation of a more integrated information base;
  - contribute to the identification of new resource needs, including technology and tools; and
  - lead to more innovative and constructive partnerships between different sectors and interests.

Questions for Discussion

- What are the sustainable development related issues of most importance to communities?
- What would be the most effective ways for the federal government to contribute to sustainability at the community level?
- What are the opportunities for the federal government, the private sector and non-government sectors to work together on community capacity issues?

7. Social and Cultural Aspects of Sustainable Development

Vision

- A truly integrated approach to federal decision-making that systematically considers biophysical, economic, social and cultural elements.
- Improved understanding of each of these elements and their interaction in everyday life which will assist policy makers and Canadians in general to better assess whether equity and quality of life issues are being adequately addressed within this integrated approach to decision-making.

Overview

Although the concept of sustainable development has been at the forefront of the ecological movement since the late 1980s, we are only now starting to grasp the full range of underlying assumptions and consequences. For example, integrated decision-making is being identified by the Commissioner of the Environment and Sustainable Development (CESD) and others as a basic operating principle of sustainable development whereby the social (including cultural), as well as the economic and biophysical implications of any decision must be incorporated in the decision-making process.

The challenge now is to understand the consequences of applying a concept as broad as integrated decision-making to everyday practice throughout the federal government. This is critical to achieving two other elements of sustainable development identified by the CESD, namely *equity* (e.g., fair distribution of costs and benefits of development, ability to meet basic needs, entitlement to basic rights), and *quality of life* (e.g. economic security, paid employment, improved living standards). While this developmental effort will take time and require a considerable amount of work on the part of all involved, it is nevertheless essential to integrating sustainable development in all federal government policies and activities.

A key step consists in better understanding the various dimensions of sustainable development, as well as the relationship between these dimensions. A focus on biophysical issues and the so-called `environment-economy relationship' has tended to dominate sustainable development debates and policy activities. However, there is increasing recognition that social and cultural factors not only have biophysical impacts, but that they are integral components in promoting a sustainable development ethic. Operating according to sustainable development principles means seeking solutions that best address the mix of biophysical, economic, and social and cultural challenges and opportunities associated with a particular issue. In its broadest sense, sustainable development is very much about the ability of people to participate in decisions that affect them. Related challenges--and opportunities--within a culturally and socially diverse country like Canada, include:

- developing and sustaining social capital;
- maintaining and enhancing cultural space in a globalized world;
- ensuring that the movement of people and membership in Canadian society contributes to protecting the safety and well-being of Canadian society;

- promoting the equitable distribution of economic and biophysical costs and benefits; and
- facilitating the adjustment and adaptation of individuals and groups as Canada makes the transition to a sustainable economy and society.

It is safe to assume that the structures and processes of a society, as well as the beliefs, values, attitudes and behaviours of its people are directly relevant to any sustainable development effort. This perspective, endorsed by the United Nations, the World Bank and United Nations Educational, Scientific and Cultural Organization (UNESCO), is an expression of the profound belief that there is more to development than just economic growth and that sustainability has as much to do with societies and cultures as with natural ecosystems. For example, UNESCO states that:

> *Any policy for development must be profoundly sensitive to and inspired by culture itself... defining and applying such a policy means finding factors of cohesion that hold multi-ethnic societies together, by making much better use of the realities and opportunities of pluralism. It implies promoting creativity in politics and governance, in technology, industry and business, in education and in social and community development - as well as in the arts. It requires that the media be used to open up communication opportunities for all, by reducing the gap between the information 'haves' and 'have nots'. It means adopting a gender perspective which looks at women's concerns, needs and interests and seeks a fairer redistribution of resources and power between men and women. It means giving children and young people a better place as bearers of a new world culture in the making. It implies a thoroughgoing diversification of the notion of cultural heritage in social change (Our Creative Diversity / UNESCO - 1996).*

Although such theoretical arguments can be made about a relationship between social and cultural issues and the application of sustainable development principles, much work remains to be undertaken in order to validate this relationship. This work should focus on:

- Exploring and defining the broad social and cultural dimensions of sustainability (such as social cohesion, diversity, citizenship, participation, values and beliefs, etc.);

- Better understanding the impacts of socially and culturally focused activities on the biophysical environment and the economy; the impacts of economic and environmentally focused activities on society and culture; and the potential contribution of such social and cultural activities to sustainable development;

- Ensuring adequate consideration of social and cultural factors (e.g. poverty, demographic change, human settlements, diversity, cultural expression, etc.) in an integrated decision-making approach at the department/agency and interdepartmental levels.

In addition, the empirical expression of the relationship between social and cultural factors and a sustainable development ethic in a country like Canada remains to be demonstrated and the implications of this relationship for public policy still need to be understood.

Opportunities

The renewal of sustainable development strategies by departments and agencies offers an excellent opportunity to establish the foundation for a coordinated and cooperative examination of ways in which integrated decision-making can be introduced and strengthened within the federal government. The renewal process, including public consultation activities, also offers a clear venue for discussing how social and cultural issues should be incorporated into an integrated decision-making framework.

Discussion on this topic should, however, continue beyond the immediate renewal process. The subject should be included as part of professional and academic conference programs, policy fora, and other like venues. Research on this topic should be pursued through the Policy Research Initiative and other similar government and university undertakings. Case studies and pilot projects, such as the Sustainable Communities initiative, also offer ideal opportunities to empirically test some of the theoretical ideas that are bound to be generated in the attempt to develop an integrated decision-making approach generally and identify its social and cultural aspects more specifically.

Federal Approach

Numerous federal government policies and programs deal directly or indirectly with a wide range of social and cultural issues. However, government action in these areas is, more often than not, separate from actions on the biophysical (or environmental) or economic fronts. There has recently been a recognition that adopting a sustainable development ethic implies the adoption on the part of government of a more integrated consideration of the social, as well as biophysical and economic, ramifications of decisions and actions. In addition, in early 1999, initial discussions took place among several departments and agencies aimed at improving the understanding of the social aspect of this integrated approach. This exchange also confirmed the importance of cultural factors within the social dimension. Nevertheless, much work remains to be accomplished to identify the components of the social and cultural dimensions and to include these in an as yet to be developed model of integrated decision-making.

Challenges

Several challenges that should be addressed include:

- Developing and implementing integrated decision-making models to guide the government in its efforts to embed sustainable development as an operational principle;
- Improving understanding of the importance of considering social and cultural issues as an integral part of a sustainable development approach;
- Developing more internal expertise to understand the relationship between social and cultural factors and sustainable development;
- Conducting more studies on specific social and cultural issues in order to understand the links between these issues and sustainable development objectives;
- Avoiding the confusion of issues surrounding sustainable development by trying to

address too much within a model for integrated decision-making;
- Overcoming concerns that a focus on social and cultural issues in a sustainable development approach will compete with, or distract from, a focus on biophysical issues; and
- Improving understanding of the broader context in which social and cultural issues will be considered as part of a sustainable development objective at the federal level (e.g. recognition that the capacity of any governmental actor to address population settlement issues is largely constrained by Charter mobility rights).

Overcoming these challenges is critical, not only to a successful incorporation of social and cultural considerations in a truly integrated decision-making approach but, also to the formulation of the integrated approach itself in the first place.

Path Forward

Over the next three years, the following activities are proposed:

- Development of a work plan for the exploration of the social and cultural aspects of sustainable development in the context of an integrated decision-making framework in the federal government.

- Encouragement of academics, non-governmental organizations and government researchers to undertake research on the links between social and cultural issues and sustainable development in a public sector context.

- Identification of the types of indicators and performance measures that could be used to assess, from a social and cultural perspective, progress in implementing sustainable development in the federal government.

Questions for Discussion

- How can issues related to diversity in society and sustainable development be more constructively linked to allow for better understanding by citizens and policy-makers?

- How can we ensure a more equitable distribution of wealth in the context of sustainable development?

- How can we empower the voluntary sector to participate in promoting a more sustainable economy and society?

8. Sustainable Development and Healthy Canadians

Vision

- Federal government programs that help the people of Canada maintain and improve their health and overall quality of life in a manner that is environmentally, socially, culturally and economically sustainable.

Overview

On average, Canadians are now healthier than ever before. Canada ranks among the top three developed countries in the world in terms of life expectancy, self-rated health and mortality rates. Average life expectancy has reached a new high of 75.7 years for men and 81.4 years for women. Sixty-three percent of adults say that their health is excellent or very good, while only 9% rate their health as fair or poor. In 1996, Canada's infant mortality rate dropped below six infant deaths per 1,000 live births for the first time. These improvements in health, coupled with greater economic prosperity and environmental conservation have resulted in an overall enhancement in quality of life for Canadians.

These and other improvements in health status have been based largely on economic and social development that has, in turn, been supported to a large extent on the use of Canada's natural resources, including its minerals, forests, fisheries, agricultural land and energy reserves. But these resources are not limitless and we must find ever more sustainable ways of using them--ways that allow us to maintain and enhance our health, while allowing future generations of Canadians to meet their expectations for quality of life and good health.

Unfortunately, good health and well-being is not shared equitably by all sectors of our society. On average, Canada's aboriginal peoples have a poorer health status than other Canadians, including higher infant mortality rates, lower life expectancy and a higher prevalence of some chronic diseases. The number of homeless people in urban centres in Canada has also increased.

The following is a description of the key issues related to sustainable development that have a direct impact on our health and quality of life.

Natural and built environment

- Climate Change and Air Quality Impacts

  Global climate change is expected to negatively affect the pattern of morbidity and mortality in Canada due to adverse impacts on a variety of health determinants. There will be changes in the global occurrence of infectious diseases (e.g., the potential spread of malaria and dengue fever to southern regions of Canada), health impacts of urban air pollution episodes and more severe weather events (e.g., increased heat stroke incidence), serious disruption in existing agriculture resulting in income loss, and social, economic and health impacts of mitigation efforts.
- Food Safety, Quality and Availability

Protecting and assuring the Canadian food supply entails monitoring and regulatory interventions. The challenge in a sustainable development context is to be able to demonstrate to Canadians that their food supply is safe, nutritious and affordable. Food-borne bacterial contamination results in over 10,000 reported cases of illness in Canada each year and there are thought to be at least as many unreported cases. The presence of chemical contaminants in food is a related issue, especially the contamination of fish and wild game that are consumed by aboriginal people and others. The use of genetically modified food is another concern for some Canadians as is Canada's capacity to produce quality food to meet growing national and global demands. Although most Canadians can afford a healthy diet, some cannot as evidenced by the increased use of food banks, school breakfast programs and other support mechanisms.

- Water Quantity and Quality

  Canada has about 20% of the world's supply of freshwater, however there are growing water shortages in Canada and the US. Increasing shortages in the US may lead to increased demands for diversions from Canada. Water quality is a related issue. Water is essential for health, but it can be contaminated with chemicals, bacteria and viruses, making it unsafe for consumption despite its natural abundance.

- Safety of Industrial and Consumer Products and Activities

  Reducing exposure of Canadians to potentially dangerous products, activities and environments requires that we continue to examine our utilization of some consumer products, tobacco products, transportation modes, energy conservation and a range of chemical substances. Indoor air quality (associated with smoking, cooking and product off-gasing), when coupled with outdoor air quality (resulting from vehicle traffic, long range pollution and industrialization) contributes to $2.3 billion in health care costs for respiratory diseases annually in Canada.

Social environment

- Sustaining Families and Early Child Development

  Inter-generational equity is at the core of sustainable development: we are responsible for creating healthy social and physical environments for our children to inherit. Optimizing early childhood development, especially during the period of fetal development and the first few years of life, is essential. Investments in early childhood education can provide the basis for a long, healthy and productive life and can reduce the costs and demands on Canada's health care, social services and criminal justice system. Sustainable development includes the creation of social and physical environments that promote early child development, including: protection from risks; efforts to assist parents, families and communities to provide adequately for children and to nurture skills; and, to provide appropriate social and medical intervention strategies for children who are 'at-risk'.

- Community Capacity for Lifelong Health

  Building community capacity for action on the determinants of health contributes to overall health status and ultimately the sustainability of

communities. Building this capacity nationally and internationally requires the provision of support to communities such as information, advice, skills development, partnership building, networking, marketing and infrastructure and some direct funding through grants and contributions. These supports will facilitate voluntary sector action on health determinants across the lifecycle (e.g. developing community capacity to support the health needs of an aging population).

Economic environment

- Effects of Income on Health

  Income and income distribution affect health in significant ways. Low income Canadians, for example, are more likely to die at a younger age and to suffer more illnesses than Canadians with higher incomes, regardless of age, sex, race and place of residence. At each rung up the income ladder, Canadians have less sickness, longer life expectancies and improved health. The distribution of income in a given society may be a more important determinant of health than the total amount of income earned by society members collectively. Large gaps in income distribution lead to increases in social problems and poorer health among the population as a whole.

- Impacts of Unemployment and Literacy on Health

  Unemployment has serious negative consequences on individual physical and mental health, as well as an impact on the health of families. Income is directly linked to levels of literacy and employment. Canadians with low literacy skills, for example, are more likely to be unemployed and poor, to suffer poorer health and to die at a younger age than Canadians with higher literacy levels. Stimulating education and employment in an environmentally and socially sustainable way is essential for health and well-being.

Opportunities

By fully implementing sustainable development principles and practices, the federal government has a significant opportunity to consider and address population health and well-being more systematically in all its decision-making.

Federal Approach

The Speech from the Throne (1999) committed the government to several initiatives that will strengthen health and healthcare in Canada and promote sustainable development. These include taking further action on environmental health issues, modernizing health protection, improving Canada's food safety program, meeting the needs of aboriginal people and protecting children.

The government has already put in place, or is updating, many acts, regulations, policies and programs to make progress towards sustainable development and improved health. The implementation of environmental management systems by all federal departments directly benefits health by reducing unnecessary consumption of natural resources and production of harmful wastes. The new *Canadian Environmental Protection Act*, jointly administered by the Ministers of the Environment and Health, has as a primary purpose contribution to sustainable development. Similarly, one of the key objectives of the *Canadian Environmental Assessment Act*, now undergoing a five-year review, is to encourage sustainable development and includes an assessment of a project's potential effects on health. Amendments to the *Pest Control Products Act* and the revamping of other legislation related to health protection will recognize the importance of sustainable development. The federal cabinet has updated its directive on strategic environmental assessments of proposed policies, plans and programs to ensure that environmental health impacts are minimized. The National Children's Agenda has fostered the integration of federal initiatives that address the physical and social needs of children in partnership with the provinces and territories. International agreements on biosafety, wastes, prior informed consent, persistent organic pollutants and toxic metals are being negotiated or implemented to reduce the effects of pollutants on the health and well-being of all Canadians.

Challenges

Although the federal government is taking action on sustainable development and health, there remain significant challenges that affect our ability to efficiently and effectively address health issues:

- **Determining how to focus and combine the influences that all partners have on the determinants of health to optimize the quality of life of Canadians.** There are multiple determinants of health, each of which is influenced by a wide range of jurisdictions and sectors.

- **Finding ways to ensure that all federal government policies and programs consider the health impacts of their activities.** Although the federal government is only a partner in the creation of health and wealth of Canadians, it is a major contributor. Population health should not be seen as an isolated priority, but rather as a resource for achieving other government priorities such as social cohesion and economic sustainability. (For example, see appendix for an indication of the health concerns associated with the theme areas presented in this Discussion Paper.)

- **Finding credible measures of change that can guide the federal government to act more purposefully in the areas where it can affect the quality of life.** Developing indicators for quality of life, well-being and health is essential for measuring change and gauging progress on sustainable development.

- **Demonstrating practical means for employing sustainable development approaches and identifying the ensuing social, economic and environmental gains for all Canadians.** There is a lack of understanding of how to apply sustainable development principles and practices to health issues in both the private and public sector.

Path Forward

In the second round of sustainable development strategies, the federal government is committed to building a healthier environment and a healthier economy that can support and strengthen population health over the long-term. In particular, the government proposes to accelerate the work with its partners and stakeholders to create social and physical environments that support the health of all Canadians, emphasizing the social, economic and environmental conditions that will sustain health over the long-term. This could include:

Ensuring that the federal government's policies and programs take the health of Canadians into account, for example by:

- Building partnerships on health, the environment and sustainable development;
- Considering the health needs of Canadians of all ages;
- Working on Aboriginal health and health in the North;
- Integrating health considerations into risk assessment / risk management procedures and decision-making processes;
- Reducing the government's own footprint on the ecosystem;
- Understanding the health implications of climate change and mitigation strategies;
- Jointly reviewing federal policies for their health and environmental impacts;
- Promoting sustainable agriculture, forestry and aquaculture, rural health, integrated pest management, and economic development;
- Integrating health considerations into sustainable transportation and sustainable communities initiatives; and
- Accelerating the implementation of the federal environmental health strategy.

Building the information base on sustainable development and health, for example by:

- Supporting the Canadian Institutes of Health Research and linking them with sustainable development research activities;
- Supporting the health component of the bio-regional programs (e.g., Great Lakes, St. Lawrence, Georgia Basin, Arctic Canada); and
- Developing tools, models and approaches to support decision-making for health and sustainable development.

Encouraging others (e.g., communities, non-governmental organizations and the private sector) to make health a focus of sustainable development activities, for example by:

- Developing inter-sectoral initiatives on population health;
- Strengthening federal-provincial-territorial activities relevant to sustainable development;
- Supporting healthy and sustainable communities in both urban and rural settings;
- Promoting individual and corporate choices and actions that sustain health; and
- Strengthening capacity for action on health and environment issues in developing countries, which have an impact on the health of Canadians.

Questions for Discussion

- What do you consider to be the most significant sustainable development and health issues that Canada overall needs to address?
- Do you see a role for yourself and your organization in addressing health and quality of life issues in a more comprehensive fashion?
- Do the key issues described in the overview chapter provide an adequate starting point for the development of federal strategies? Will the work proposed in the section "Path Forward", address these key health and sustainable development issues in an integrated way and contribute to the quality of life of Canadians?

APPENDIX: HEALTH AND THE EIGHT PRIORITY ISSUES

The requirement for many federal departments to prepare sustainable development strategies provides an opportunity for the government to make further progress on reconciling the environmental, social/cultural and economic consequences of development, while maintaining and improving population health. Indeed, there are health concerns associated with all of the eight themes that form the basis of this consultation.

Theme	Linkages to Health
Sustainable Government Operations	• The health of people living near federal facilities will be enhanced by more sustainable government operations. • The federal government provides healthy, safe workplaces to the extent possible. • By reducing its contributions to environmental degradation and wasteful consumption the federal government will directly benefit population health.
SD Indicators and Reporting/Knowledge and Information	• Indicators of health and well-being are important in measuring progress towards SD.
Productivity through Eco-efficiency	• Eco-efficiency means that resources will be conserved to allow future generations to meet their health needs.
Sustainable Development in the International Context	• International trade and economic development should benefit the health and well-being of people in developing countries. • Provide safer imported food, products and markets for Canadians. • International agreements to reduce global pollution and leadership through the Intergovernmental Forum on Chemical Safety.
Federal Sustainable Development Strategy for the North	• Long-term health in the North will benefit directly by sustainable resource use, sustaining traditional ways of life, reducing exposure to contaminants and ensuring the availability of quality health services. • The Northern Contaminants Program. • The Arctic Monitoring and Assessment Program.
Sustainability at the Community level	• Strong, vibrant communities contribute to population health.
Social and Cultural Aspects of Sustainable Development	• Social networks, social support and culture are important determinants of health.
Sustainable Development and Healthy Canadians	• Natural and built environments • Social environment • Economic environment